

FIG. 1
(PRIOR ART)

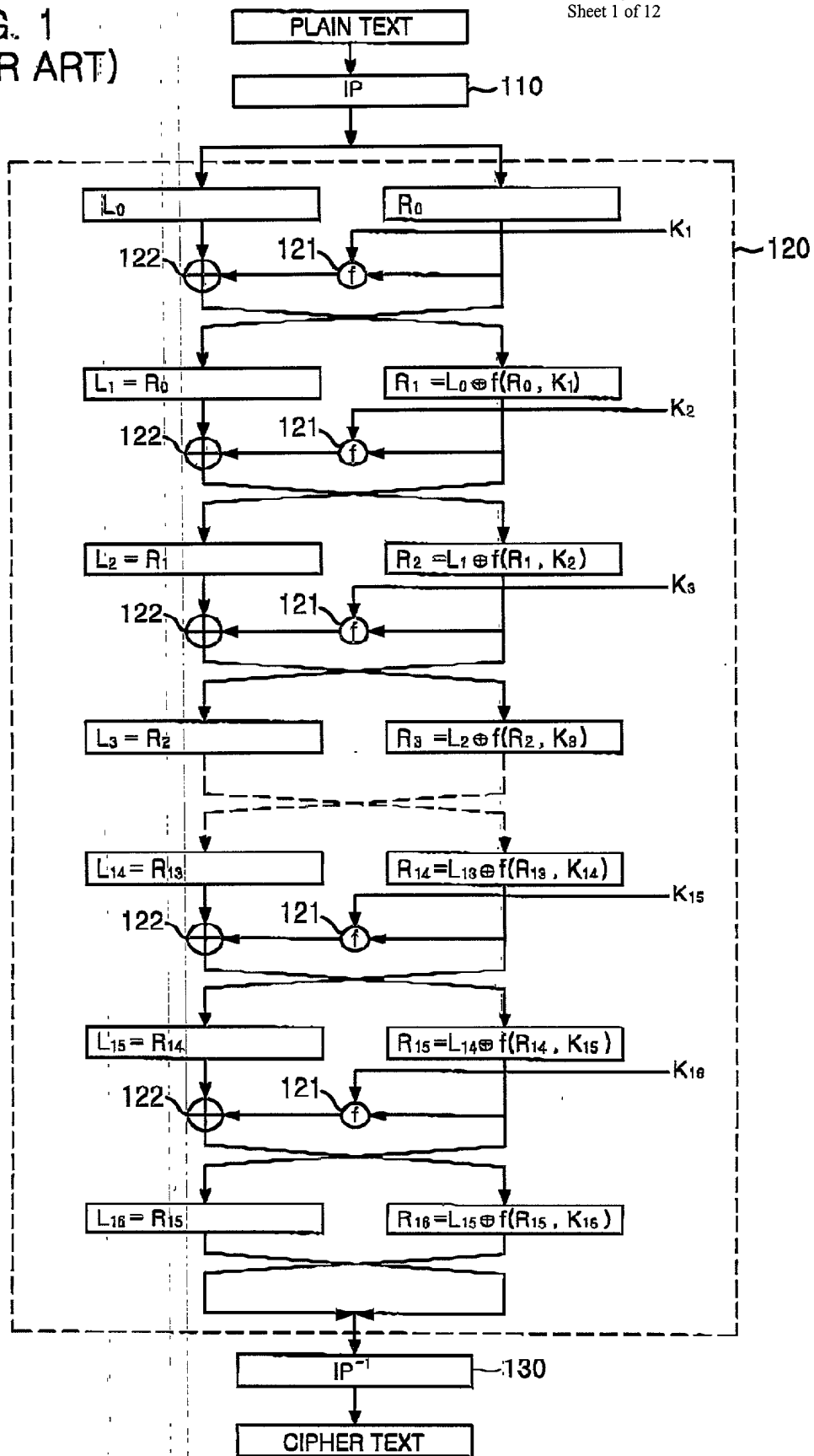


FIG. 1 (PRIOR ART)

FIG. 2
(PRIOR ART)

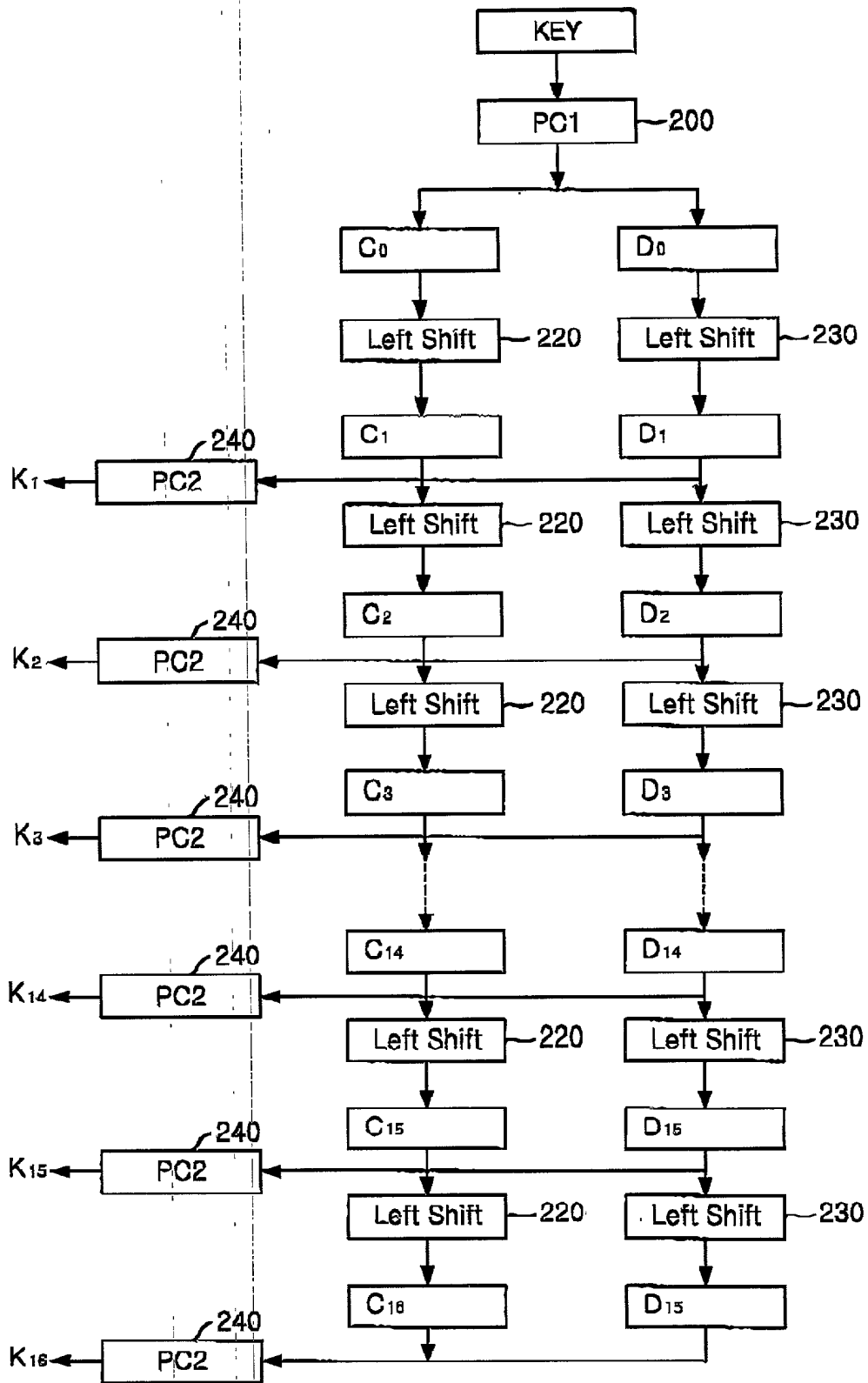


FIG. 3
(PRIOR ART)

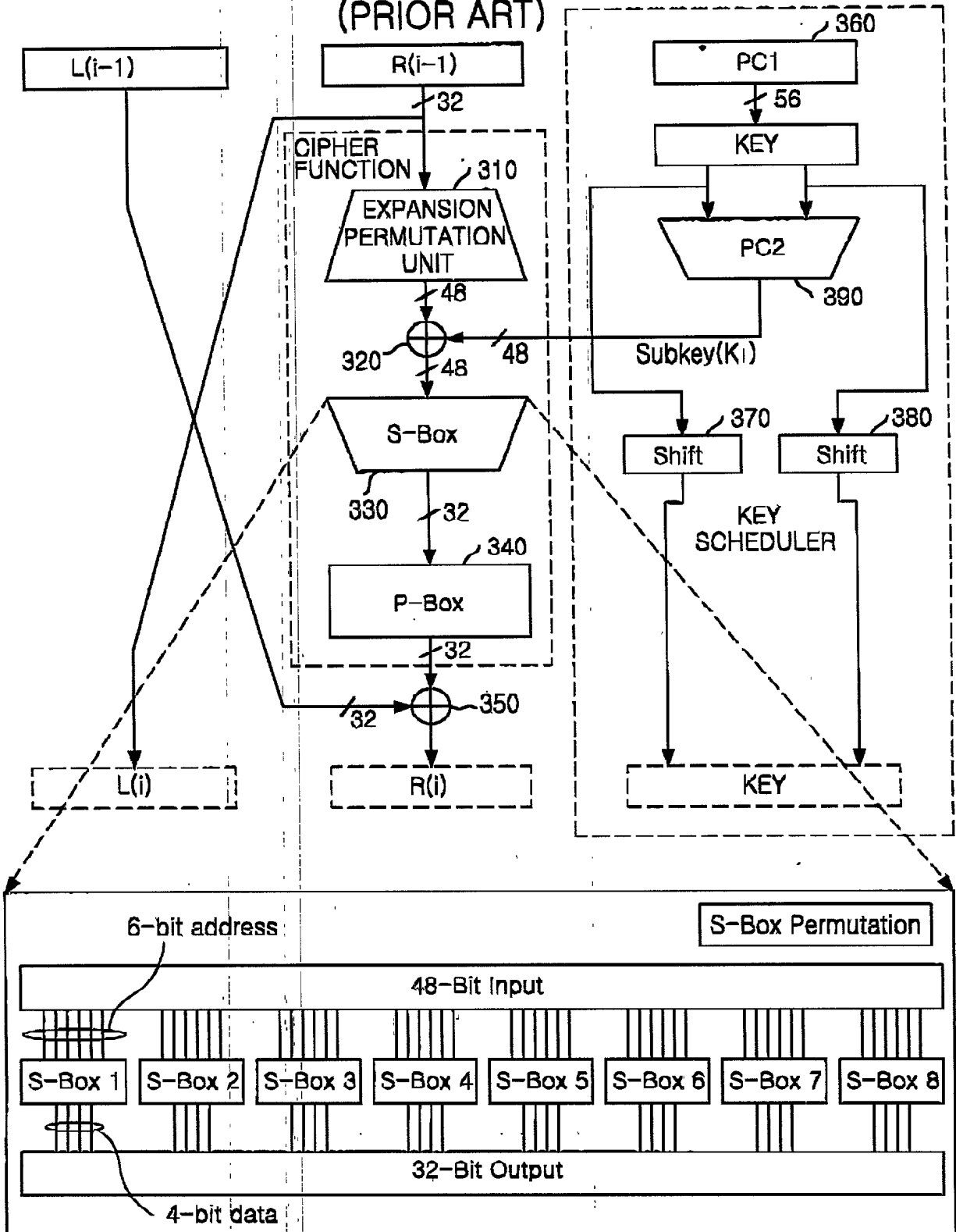
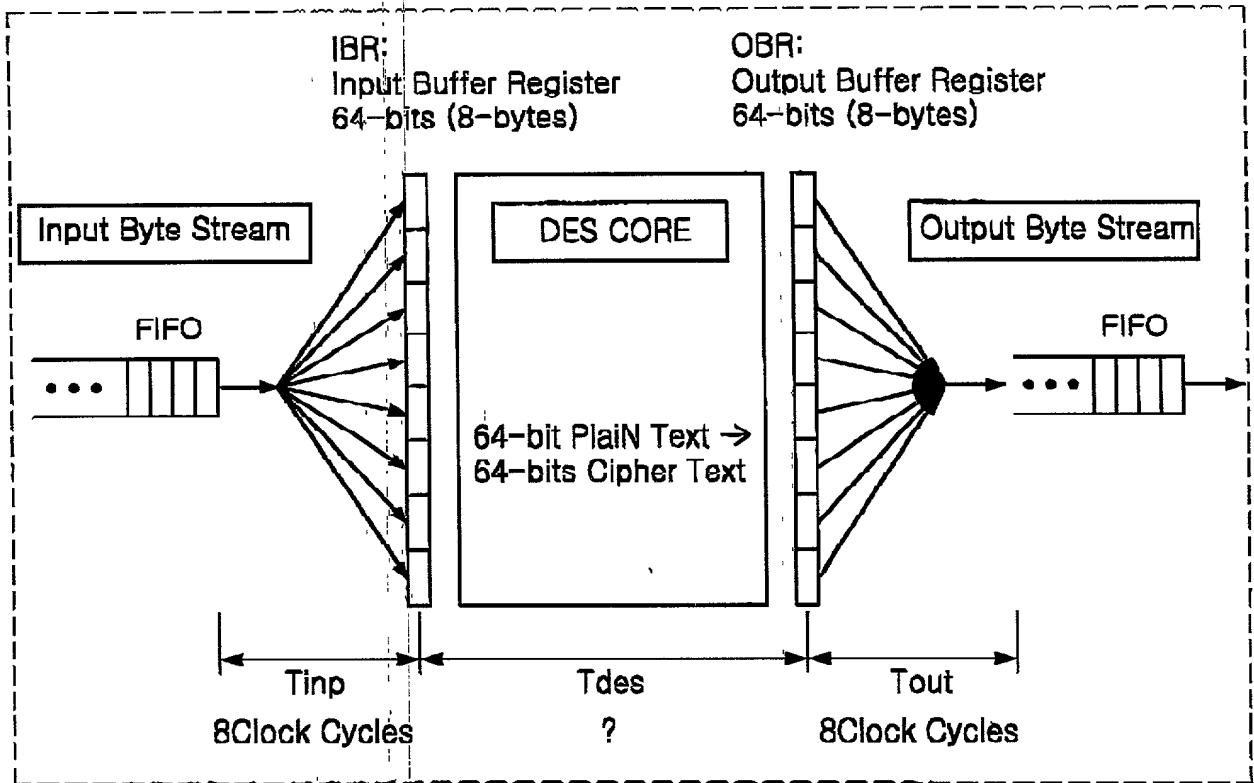


FIG. 4
(PRIOR ART)



P_i : i-th Plain Text I_i : i-th Input Processing
 C_i : i-th Cipher Text D_i : i-th DES Processing
 O_i : i-th Output Processing

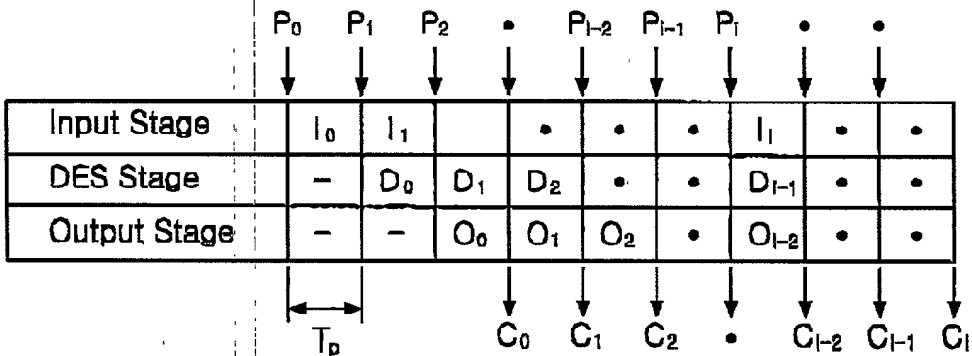


FIG. 5A
 (PRIOR ART)

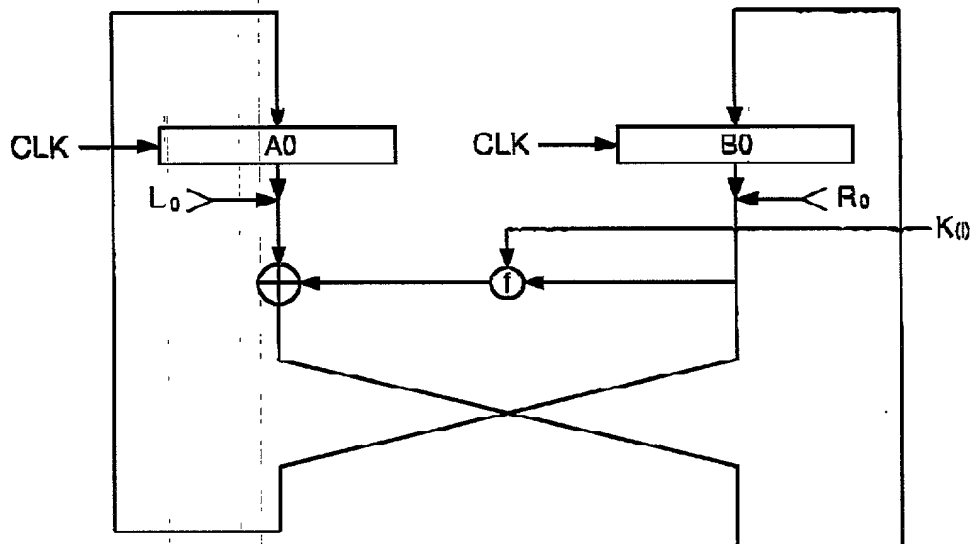


FIG. 5B

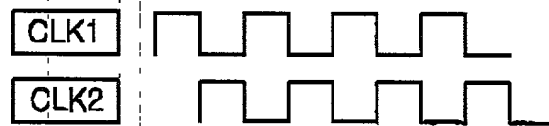
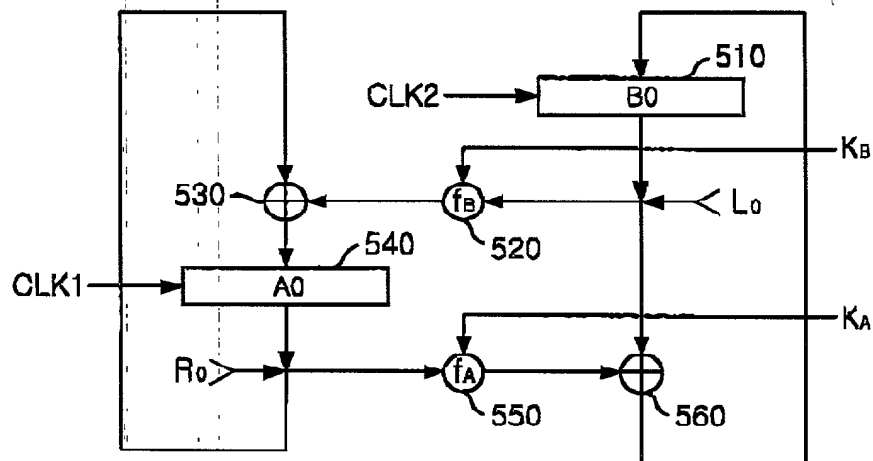


FIG. 6

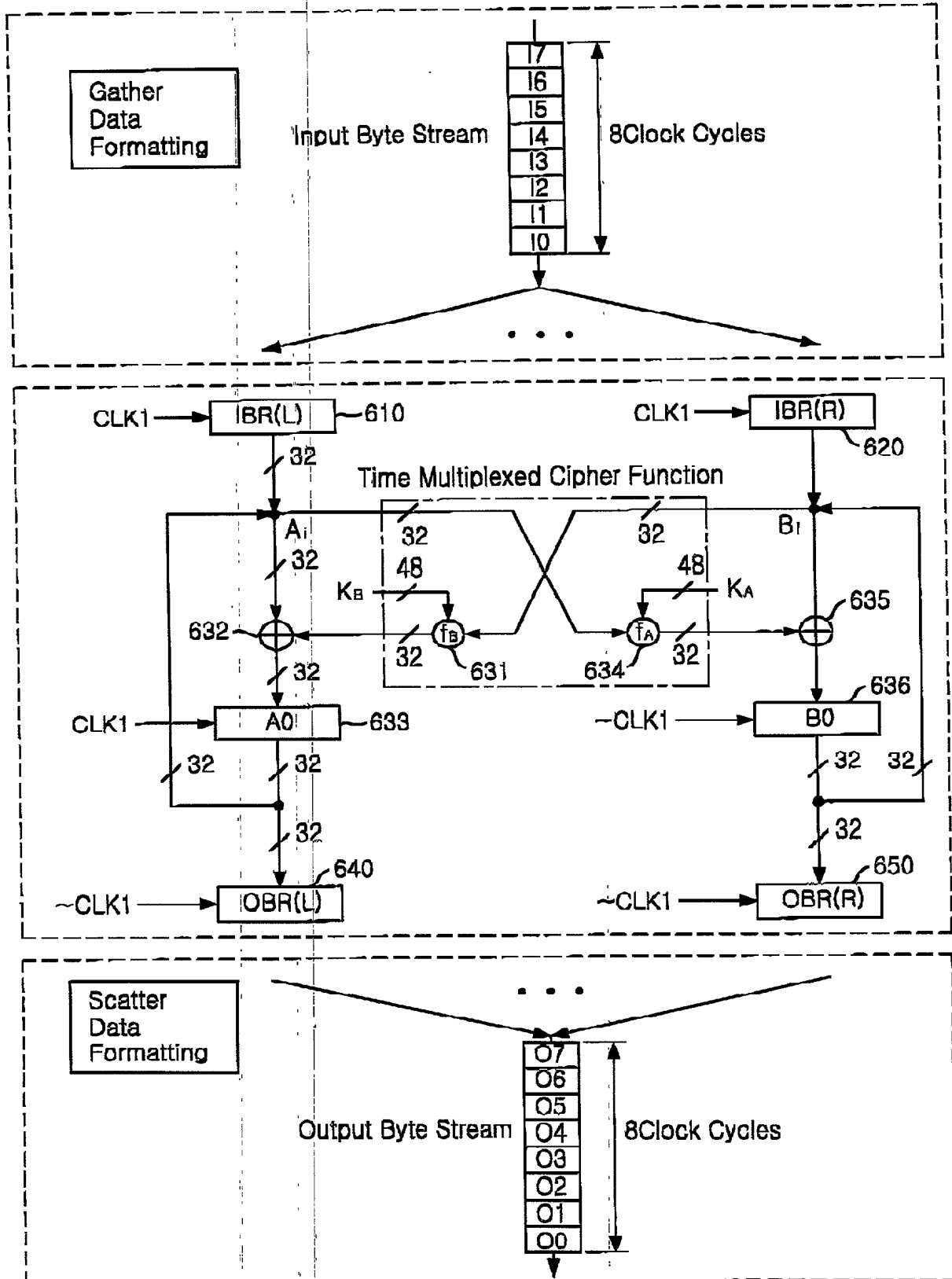


FIG. 6

FIG. 7

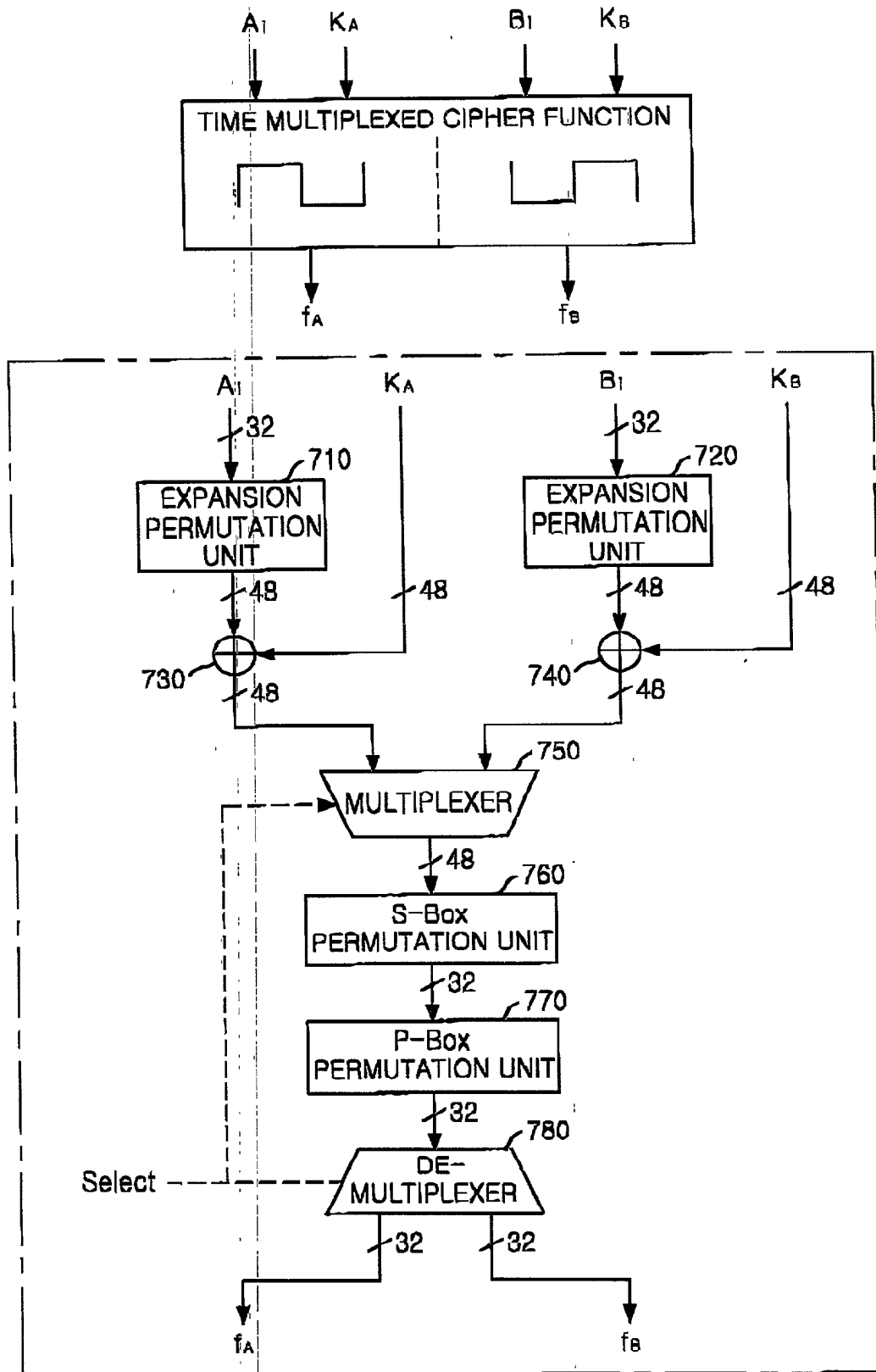


FIG. 7

FIG. 8

Round	Left Shift Amount	Total Shift Amount
1(Q ₀)	4	2
2(Q ₁)	4	6
3(Q ₂)	4	10
4(Q ₃)	3	14
5(Q ₄)	4	17
6(Q ₅)	4	21
7(Q ₆)	3	25
8(Q ₇)	2	0

Round	Left Shift Amount	Total Shift Amount
1(P ₀)	3	1
2(P ₁)	4	4
3(P ₂)	4	8
4(P ₃)	3	12
5(P ₄)	4	15
6(P ₅)	4	19
7(P ₆)	4	23
8(P ₇)	2	27

WHEN KEY IS LOADED FIRST TIME, IT SHOULD BE 1

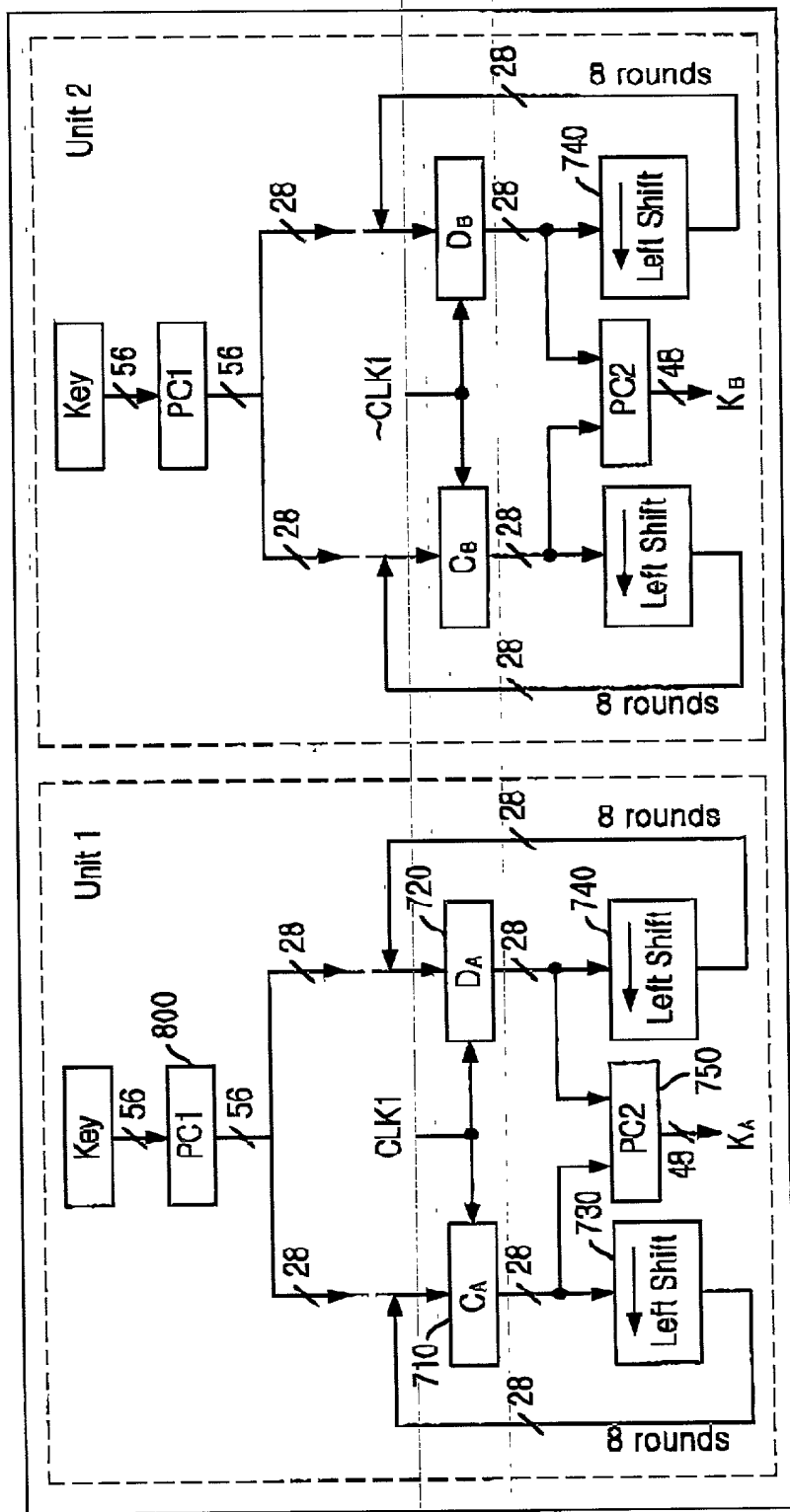


FIG. 9

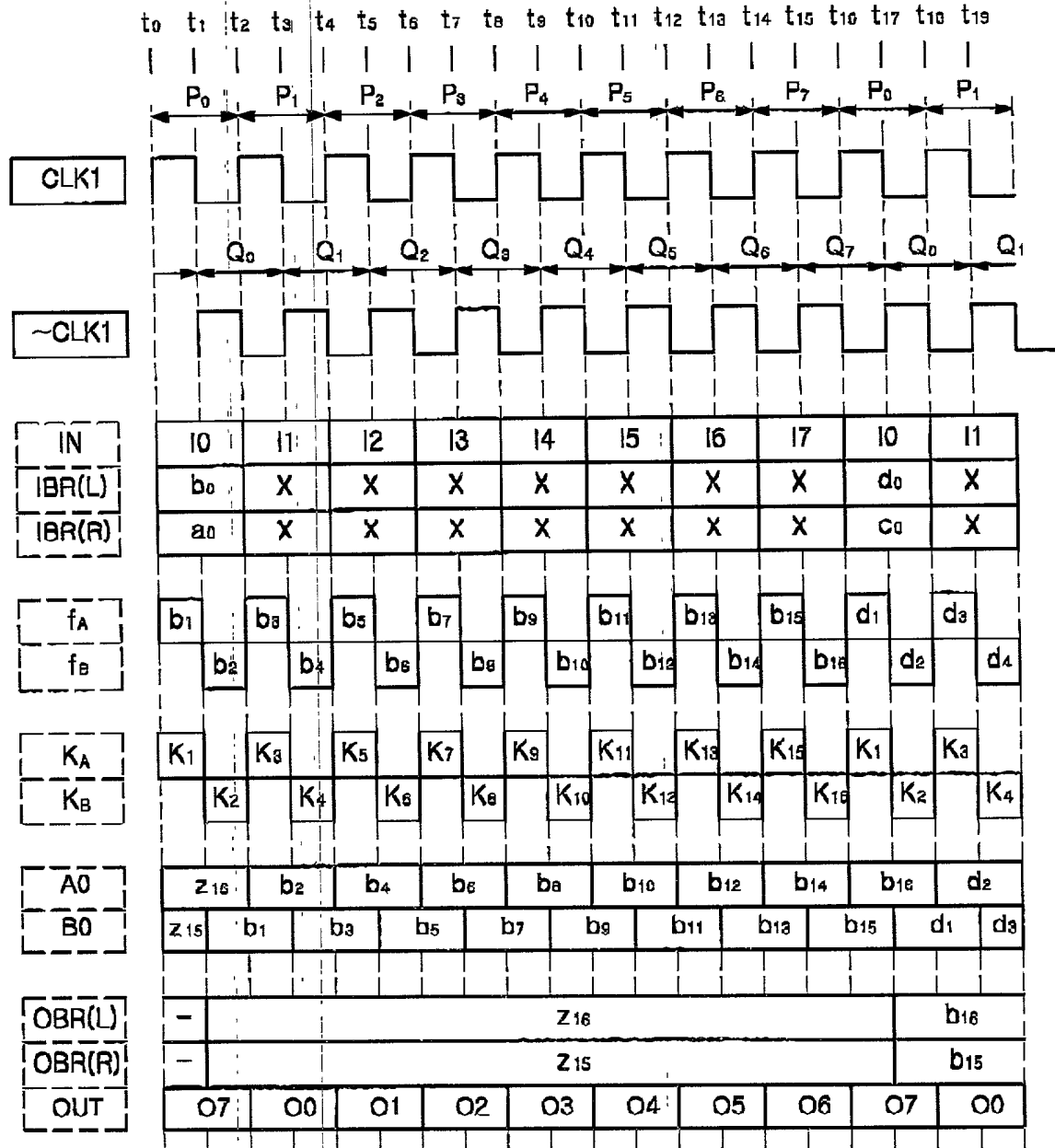


FIG. 9

Table 1. Demographic and clinical characteristics of the study population	
Age (years)	65.2 (SD 10.5)
Gender (male/female)	102/108
Education (years)	12.5 (SD 2.5)
Marital status (married/divorced/widowed)	150/30/20
Occupation (retired/employed)	150/30
Medical history (hypertension/diabetes/cholesterol)	120/40/60
Medication (antidepressants/antipsychotics)	80/20
Alcohol consumption (yes/no)	30/170
Smoking status (current/former/never)	20/100/180
Family history (depression/schizophrenia)	40/60
Duration of illness (years)	15.5 (SD 10.5)
Previous hospitalizations (yes/no)	100/80
Current symptoms (depression/schizophrenia)	100/80
Response to treatment (yes/no)	150/30
Side effects (yes/no)	30/170
Quality of life (yes/no)	150/30
Social support (yes/no)	150/30
Stress levels (yes/no)	150/30
Compliance with treatment (yes/no)	150/30
Overall health status (yes/no)	150/30
Family functioning (yes/no)	150/30
Community integration (yes/no)	150/30
Life satisfaction (yes/no)	150/30
Overall well-being (yes/no)	150/30

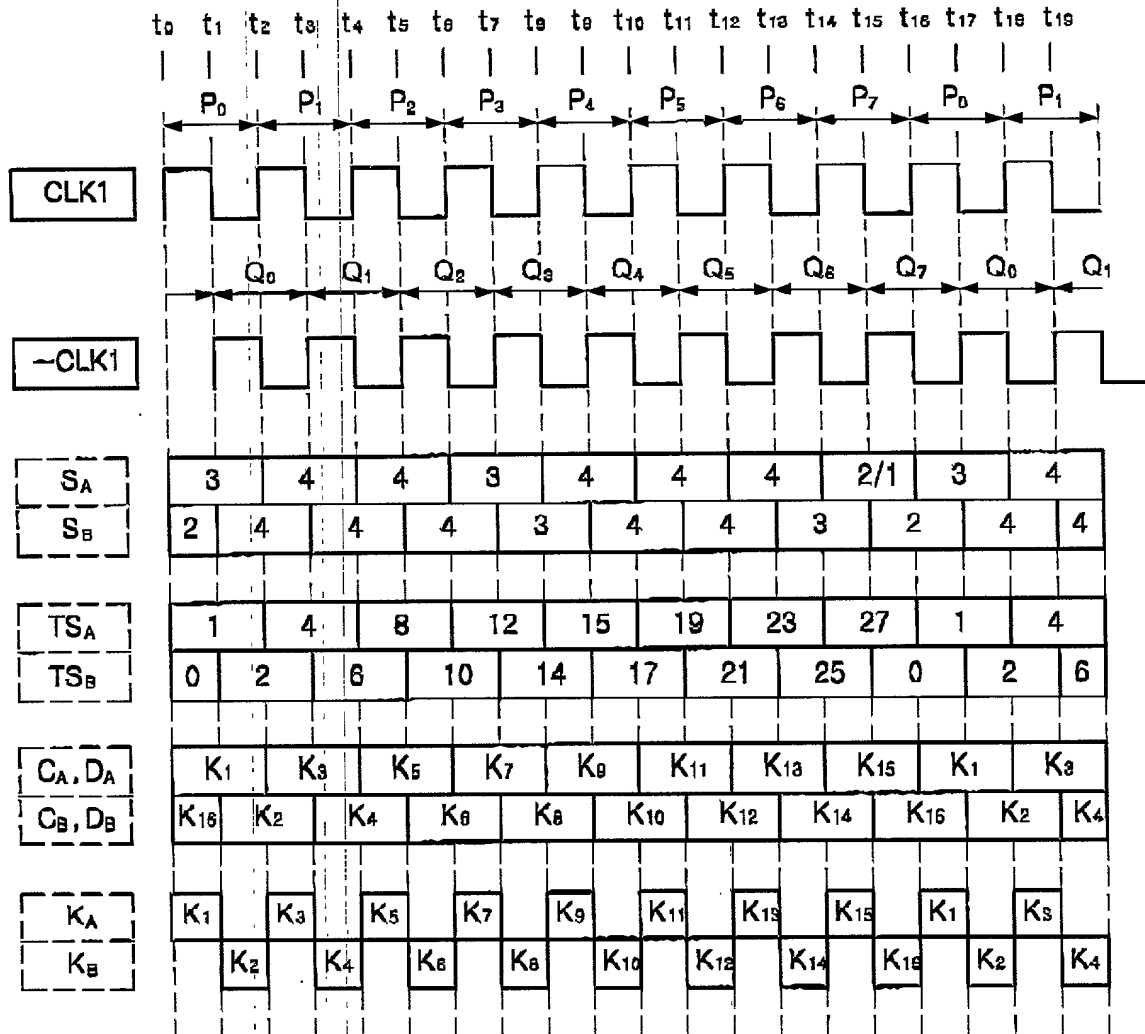
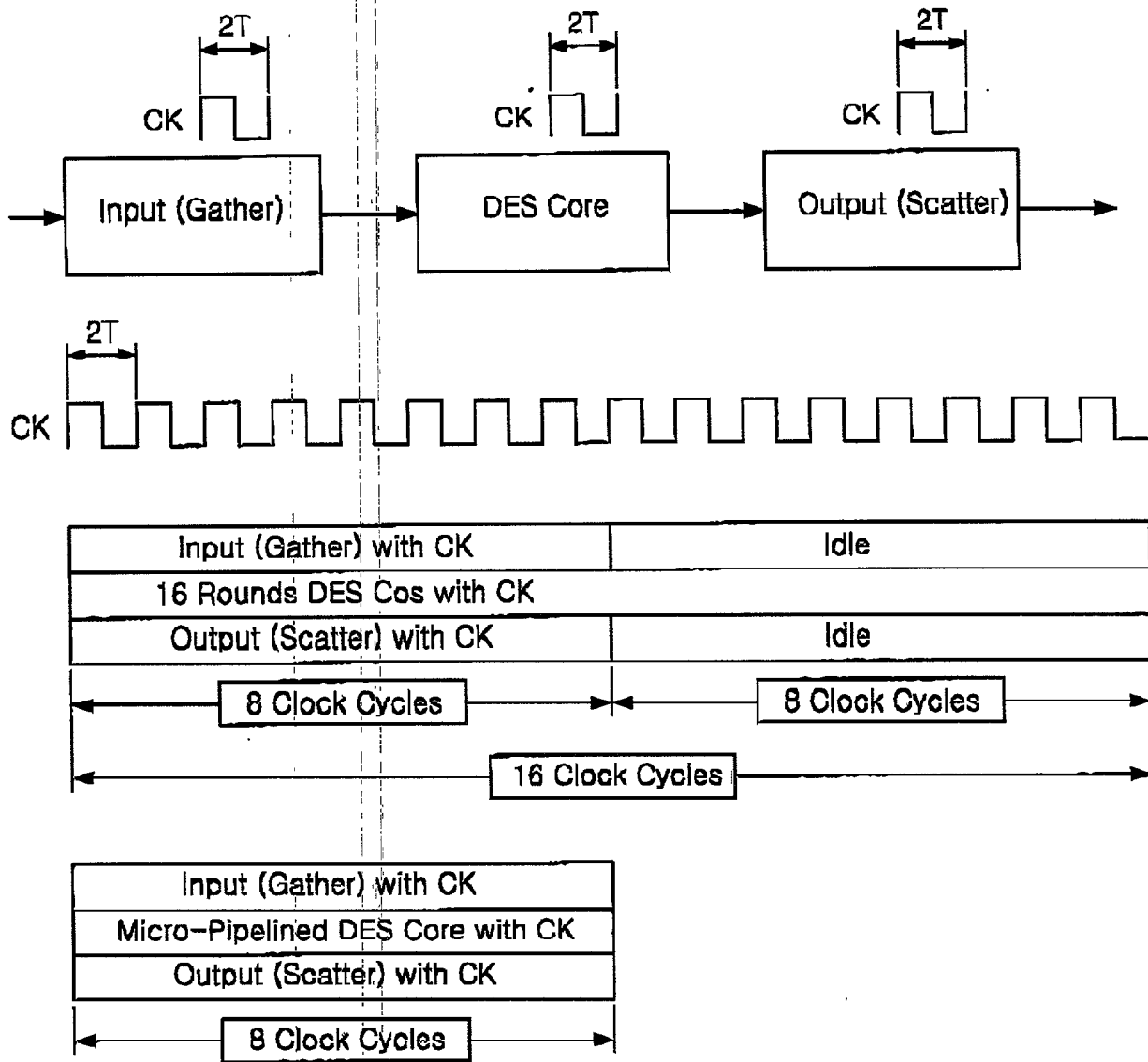


FIG. 11



TOP SECRET

FIG. 12

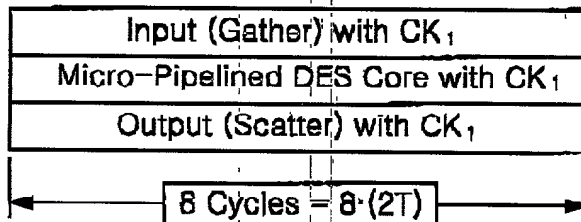
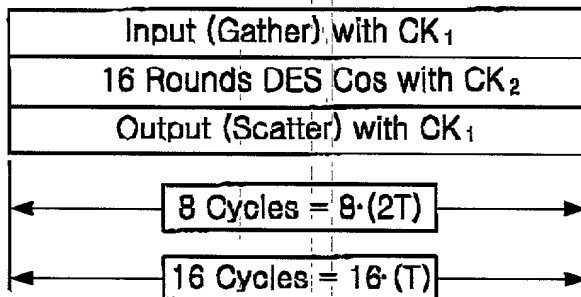
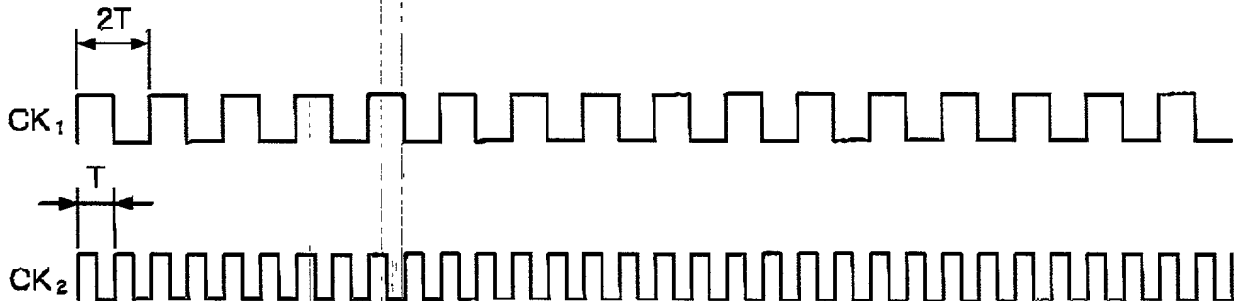
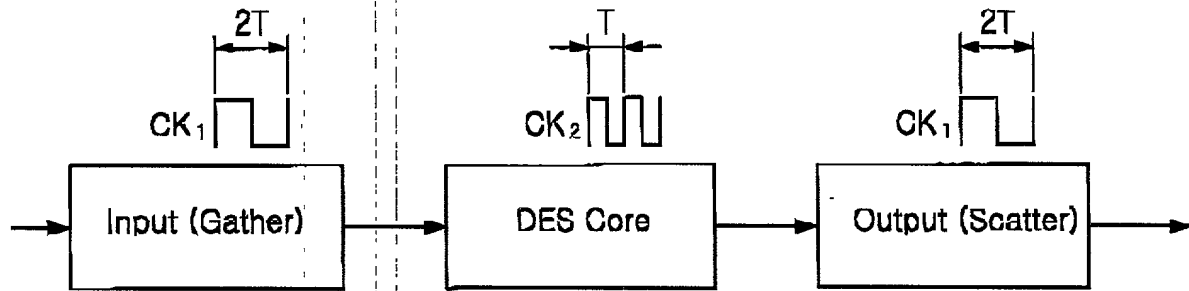


FIG. 12